5: Schwimmer E-4,5 (1966-1967) 1973
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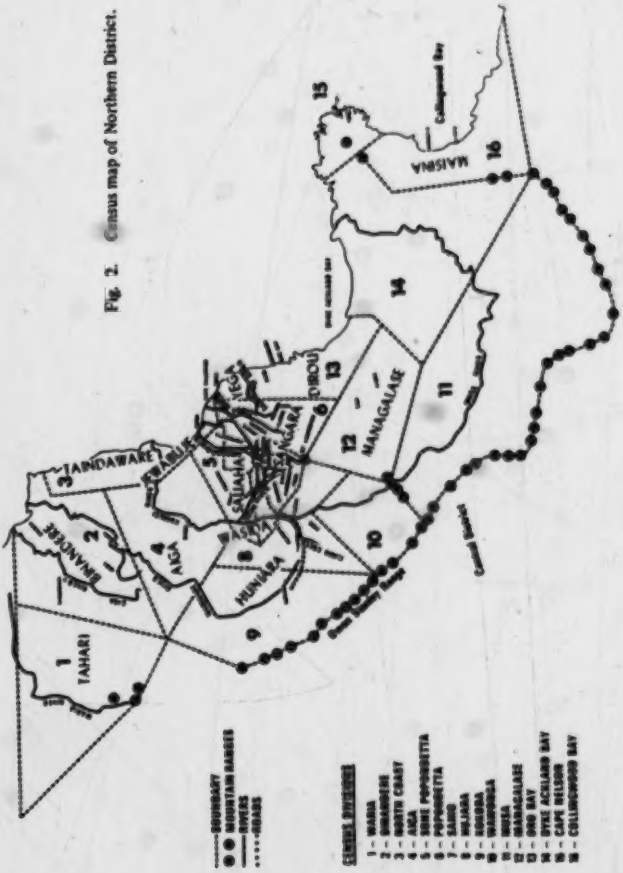

Fig. 2. Census map of Northern District.

S: Schwimmer E-4,5 (1966-1967) 1973
OJ23 Orokaiva OJ23
Mountain Orokaiva

their home country. American troops, by their equal treatment of Negro soldiers, created the impression that racial barriers had no place in their society! The troops' friendliness to the Papuans was tangibly expressed by gifts, not only of tobacco and other small luxuries, but also of discarded tools and equipment still used in villages today. It is in these events that the Orokaiva saw the portent of the coming of a new era.

The Eruption of Mount Lamington. In 1951, a Peléan eruption occurred on Mount Lamington. The *nuée ardente* produced by this eruption completely devastated a surrounding area of 68 sq. miles (Taylor 1958). Almost 4,000 people were killed and there were hardly any survivors of the numerous Sangara tribe. Those who did survive were provided with food, medicines and other comforts by the government and were for some time maintained in evacuation camps. The evacuees were not at once allowed to return to their villages as the authorities feared further explosions in the mountain. Some officials saw in this sequence of events a chance to create Papuan model communities with up-to-date socio-economic institutions. These plans for village reform, whatever their merits, were not realised at that time, partly because the danger of further explosions was soon greatly reduced, in the view of vulcanologists, so that the people were allowed to go back to their old village sites; partly also, because the reforms were not favoured by the Australian administration which assumed power after the defeat of the Labour Government in 1951.

Intensification of Development Policy. Large scale, expertly planned social, economic and political development did not start in Papua until around 1960 (Parker 1966:189). In the economic sphere the first major development success was the building up of a coffee industry based on the production of indigenous growers using their own village land. While by far the largest quantity of this coffee is grown in the Highlands, the yield in the Northern District was enough to assure to any Orokaiva who entered the scheme an income of something like $60–100, in the year 1966–67. During that year all the villages I visited, both on the foothills and in the plains, were producing coffee. It was an activity in which any able-bodied man resident in a village would normally engage to a greater or lesser extent. Several factors aided the development of this industry.

Agricultural extension work to train the population of the Northern District in coffee growing began immediately after the eruption. A training school was set up in Popondetta. Papuan agricultural assistants were trained to give basic instruction and to distribute seed. These assistants spread knowledge not only while they were employed by the government, but even more when they went back to their villages and grew their own coffee.

Title improvement work is also beginning to contribute to agricultural development. Until 1956, the government kept entirely aloof from indigenous tenure problems and passed no ordinances enabling it to adjudicate in land disputes. By that time, however, it had become obvious that commercial arboriculture could be developed only to a limited extent unless a land registry was introduced and the traditional Orokaiva principle of maintaining residual rights in land was adandoned. Though the first attempts to change the land tenure system were unsuccessful, in 1967 it looked as though a very satisfactory procedure had been worked out. (See Ch. V.)

Road improvement was another necessary preliminary to significant village

5: Schwimmer E-4,5 (1966-1967) 1973
OJ23 Orokaiva OJ23
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TABLE II/8 ___

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ENROLMENT IN PRIMARY SCHOOLS OF THE ANGLICAN MISSION IN THE NORTHERN DISTRICT
(*Source*: Department of Education, Popondetta)

	1966	*1967 (Est.)*
Preparatory Classes	1,775	1,845
Standard 1	1,290	1,307
Standard 2	1,563	1,581
Standard 3	1,278	1,298
Standard 4	1,275	1,310
Standard 5	693	708
Standard 6	488	498
Total	8,362	8,547

Note: Some schools offered classes up to Standard 2, some up to Standard 3, some up to Standard 4, while only a few schools offered classes beyond that level. Children unable to obtain transfers to schools offering classes at a higher level might stay at school for a year or more after finishing the highest available grade. This explains the unusual statistical pattern.

development. By 1967 two important moves had been made: the arterial road between Buna and Kokoda was being rebuilt and linked to the main coffee-producing villages by a system of access roads, built with the assistance of taxes raised in villages.

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The educational services have not, so far, been very closely integrated with economic development goals. Many of the schools in the Northern District are conducted by the Mission. While the objectives of many of the Mission schools are still primarily religious, and the teaching staff has only rudimentary training, some of them do prepare students for further education at the secondary level, and provide recruits for skilled occupations. The Sasembata school attended by Sivepe children falls within that category. Chances of passing a qualifying examination for secondary schooling are good and from that point adequate financial assistance is usually available to students. Villages such as Hohorita and Inonda, lacking such opportunities, and having access to only two or three years of elementary schooling, cannot hope to have any but the brightest students advance to secondary education. As the language of instruction is English in all schools, those who do not advance beyond elementary grades do not become acquainted with concepts relevant to development objectives.[12]

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Local Government Council. The Higaturu Local Government Council, formed in 1956, serves about 15,000 Orokaiva, comprising the Popondetta, Sohe-Popondetta and Saiho census divisions. In 1966 the main activities of the

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5: Schwimmer E-4,5 (1966-1967) 1973
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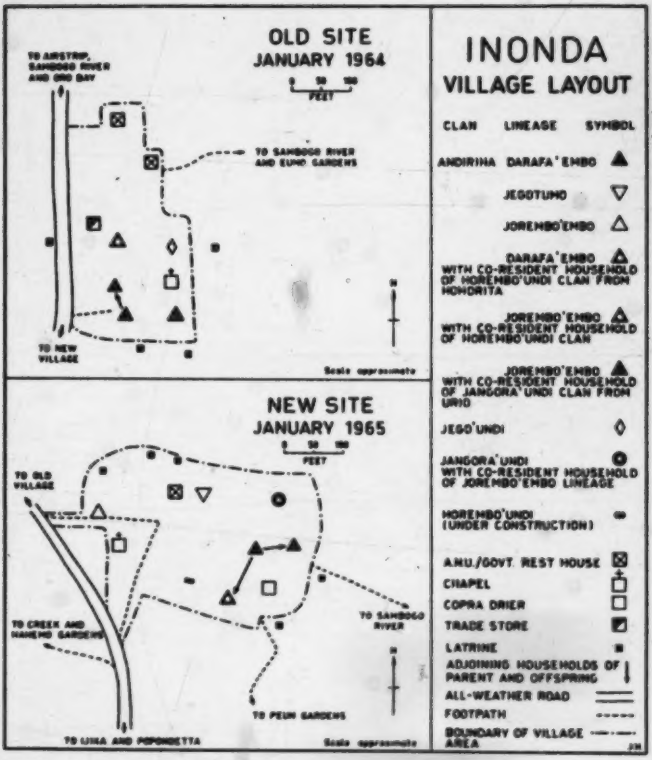

Fig. 4. Inonda village layout.

The leader, a government driver, earned about 65 per cent of the total cash income of the whole village, not only in wages but also through various enterprises on the side. He was the lay preacher as well. The only limit to his influence was the unwillingness of the pagan faction to become involved in 'modern' activities of which he was the champion. 105 622 177

Ecologically, Inonda is characteristic of the alluvial plains region to the east of the mountain. It lies between 200 and 300 feet above sea level, and has a comparatively low rain-fall and long dry periods. Its population density is low: 42 people on a village domain of 2850 acres (less than 10 per square mile). The best Inonda land is 580 acres of coarse-textured recent riverine deposits, covered with forest or regrowth and lying beside the Sambogo and Girua rivers. 133 132 161 162 134 137

5: Schwimmer E-4,5 (1966-1967) 1973
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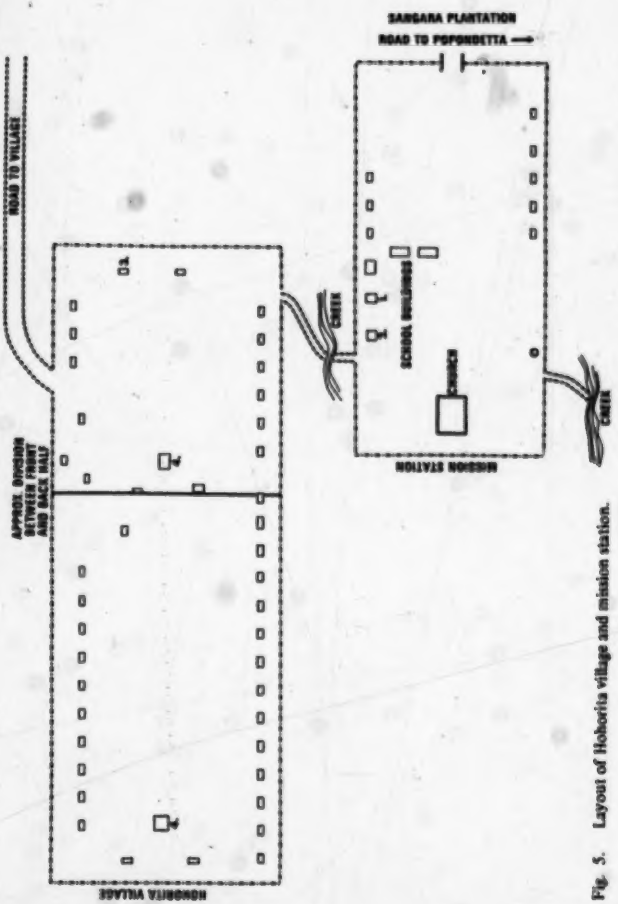

Fig. 5. Layout of Hohorita village and mission station.

5: Schwimmer E-4,5 (1966-1967) 1973
OJ23 Orokaiva OJ23
Mountain Orokaiva

101 until June 1967. Previous intensive studies had been made there by Rimoldi and
105 Waddell. Sivepe is twenty-four miles from Popondetta, but this distance represents a drive of two to four hours in a Landrover, according to the time of year. The village lies on a side road, serving a population of some 2,000 living in the valley of the Sasembata (or Hembe) and Sohu rivers, two tributaries of the Kumusi. This side road runs from the main road in a south-easterly direction as far as Kendata. The Sasembata-Sohu valley combines all the most favourable ecological conditions: heavy rainfall, deep volcanic loam, excellent drainage, easy contours. The first time I drove to Sivepe was during the dry season. Turning from the main road, I found myself on a slightly improved grass track, with villages built right across it, the sweet aroma of coffee trees (which, incidentally is strongly disliked by the Orokaiva) pervading the atmosphere, lush vegetation, and a life-style on which the Europeans had apparently made much less impact.

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Fig. 6. Village layout of old Sivepe.

5: Schwimmer E-4,5 (1966-1967) 1973
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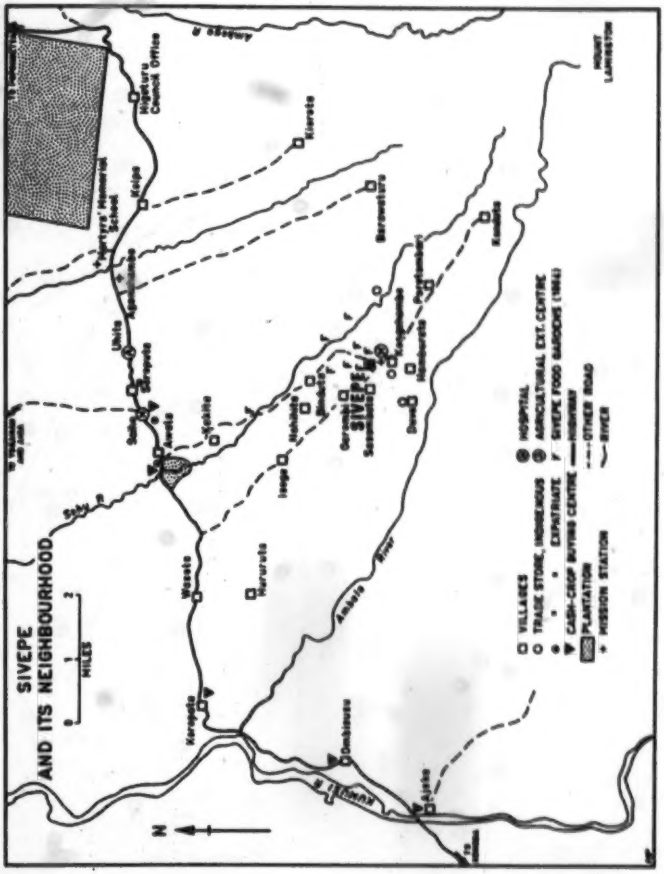

Fig. 10. Sivepe and its neighbourhood.

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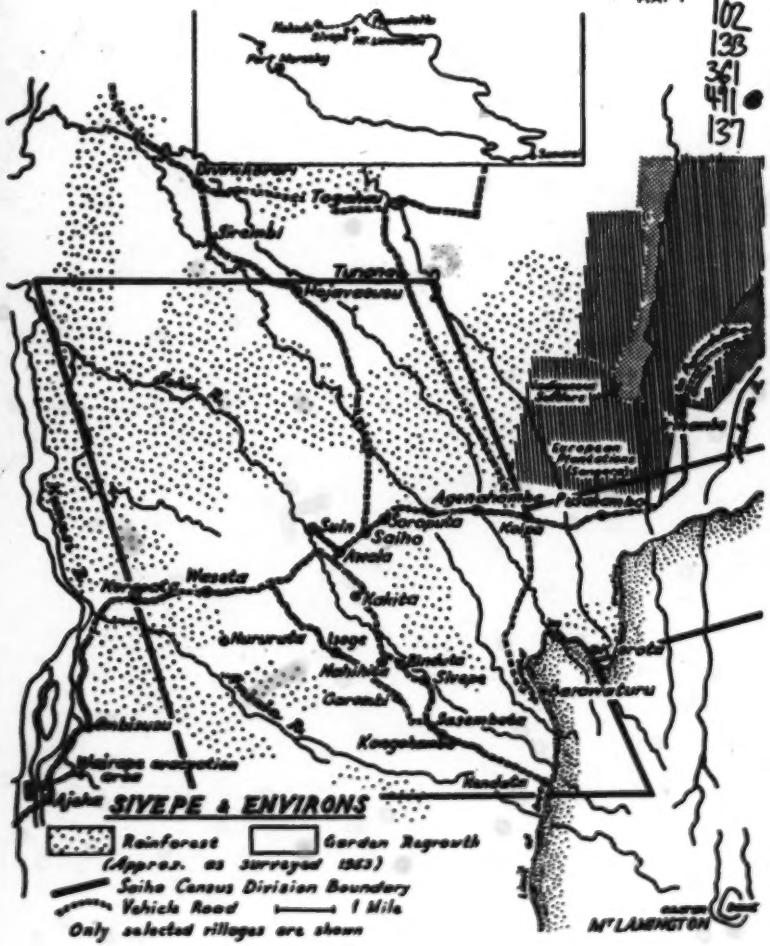
MAP 1



C21 obscure any important differences in structure and our historical
36 data are not complete enough to permit of consistent distinctions,
[162] according to size, between 'hamlets' and 'villages'. The village
[632] of Sivepe now has a population of 120 and is linked with Binduta, several hundred yards away, and with Hahihita half a mile away, to form a unit in Administration censuses. The 3 villages, together with Awala No.2,[1] form a local government council electorate.

131 Sivepe is situated on the western bank of the Sohu River, a
491 tributary of the Kumusi River, about 25 miles by road south-west
[133] of Popondetta and roughly 7 miles north-west of the crater of Mt Lamington. It is on a jeep road leading from Kendata, high on the Mt Lamington slopes, to Awala, which lies 3½ miles north of Sivepe on the Kokoda-Popondetta road. The minor road was constructed in about 1944 following the route of an old track. Between Awala and Sivepe it is marked by the sites of 9 abandoned villages, first visible indication of the history of close settlement on the country it traverses.

797 There were very few facilities for formal education in this
871 tribal area until shortly after the second world war when a number of mission schools, staffed by Papuan teachers, were established through the area and 'minor elementary education was brought to over 90% of children of a varied age range' (Belshaw 1951.:2).

An Anglican Mission primary school was established at Sasembata, 1 mile south of Sivepe, in 1945 and a European teacher has been on the staff since 1951; 9 of the 13 children of approximately school age in the group we studied now attend.[2] Some children from Sivepe are pupils at Martyrs' Anglican Mission school several miles away at Agenahambo. A primary T school[3] was established at Awala in 1961 but no Sivepe children are pupils there.

Several villagers regularly attend the church at Sasembata, which is in the charge of a Papuan priest, and most make periodic use of the medical services provided by the mission sister. Some women consult an infant welfare clinic formerly available at the mission on alternate Tuesdays and some have joined a women's sewing class held on Wednesdays.

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1 To be distinguished from Awala 2, the 'hamlet group'.

2 The ages of pupils in the 4 grades would range roughly from 5 to 15 years.

3 A government school for Papuans at which the curriculum is adjusted to the needs or sophistication of the local pupils - as distinct from primary A schools, attended almost wholly by European children, where the syllabus is set by the N.S.W. Department of Education.

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7: Rimoldi et al. E,1-5 (1962-1963) 1966 QJ23 Orokaiva QJ23 Mountain Orokaiva Sivepe

SCHEMA OF MAJOR LOCAL MIGRATIONS 1900-1950*

● Extant Village ○ Village now abandoned

⊠ Original Centre of Dispersal of Jegasa

Double lines on arrow indicating a movement means that village was thereby abandoned
Movements with same date and destination were directed by administration, as was Berekipa move in 1948

*Excluding wartime movements

Relative positions of villages are distorted for the sake of clarity. (See Map 2.) Most present dates have a margin of error of at least 5 years: Figures are given only to indicate sequences. Dates most in doubt are marked ?

8: Waddell & Krinks E-4,5 (1964-1965) 1968 OJ23 Orokaiva OJ23

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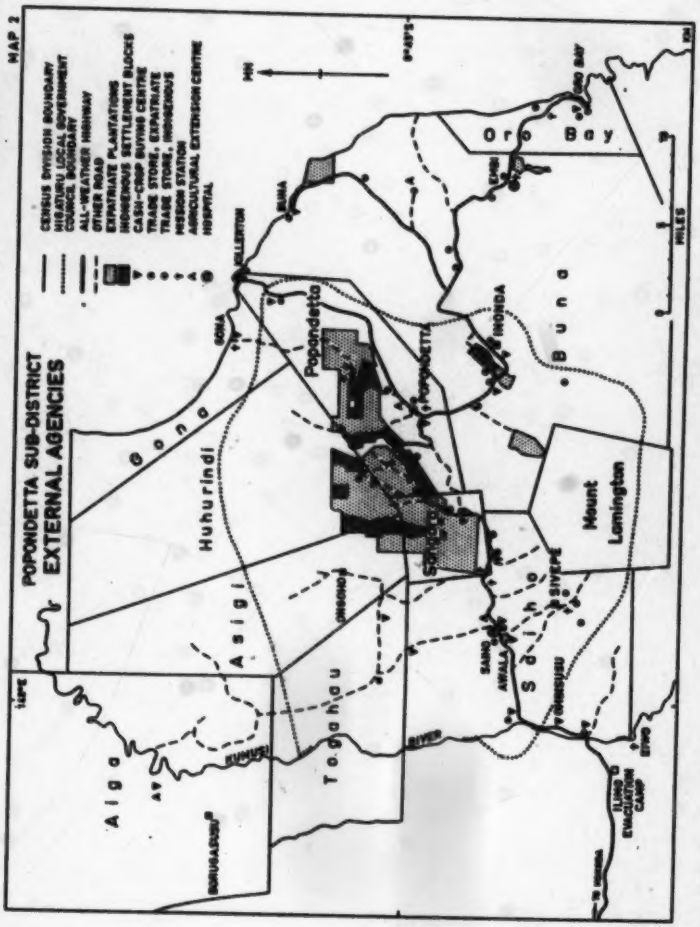

Chapter 2

Contact history and the development of cash cropping

121 The post-contact history of the Orokaiva and their experience with cash cropping are described at length to demonstrate the very limited interactions between the subsistence and advanced sectors of the economy. It is the particular character of these interactions which provides the framework for understanding contemporary Orokaiva involvement in commercial activities.

177 (a) Initial contact

The first recorded contact with Europeans was made in 1893 when the Governor of British New Guinea, Sir William MacGregor, and the Anglican missionary, Copland King, sailed along the coast as far as the Mambare River. It was, however, the opening of the Yodda valley goldfields in 1897 and the subsequent extension of government control by resident magistrates which brought the majority of the Orokaiva into the European orbit.

The first decade of contact was characterised by the extreme severity both of the resistance put up by the Orokaiva to miners travelling to the goldfields, and of the punitive expeditions conducted by the resident magistrates in retaliation for such attacks and for inter-tribal raids. Both Monckton and Murray refer to Orokaiva feelings of 'bitter hostility' (Murray 1912) and of their 'hating the government and their police' (Monckton, quoted in Walker 1909).

794 177 178 [491 [438 By 1907 the area was pacified, a road had been built from Buna to the Yodda goldfields and regular markets along it supplied carriers with food in exchange for tobacco, bottles and other new commodities. Shortly after, two cult movements appeared among the Orokaiva, one the Baigona movement, centring on magico-medical practices, the other a Taro cult, emphasising careful cultivation of taro and subsequent large feasts.[1] Worsley (1957:65-74) identified implicit anti-European elements in the latter and the beginnings of new organisational trends wherein cult leaders were

[1] For a full description of these cults see Williams 1928.

438 are supplied by villages within two or three miles of the township whereas the meat and fish may come from much further afield, since
435 their weight/value ratios are much higher than for vegetables. One pound of pigmeat sells for 10c - the price of four taros averaging eight pounds weight. Prices in the markets are standardised and
[434] not dependent on supply or demand. Those who sell meat or fish can earn worthwhile sums, since a wallaby may fetch $4 but, in general, marketing is a significant source of income only for people from the less densely-settled areas or the coast where fish or wild game are plentiful.

464 (iii) Wage employment. Several categories of wage employment are available to villagers from time to time. The construction of new all-weather roads within the sub-district has recently increased the opportunities for temporary employment as unskilled labour.[1]

The Administration frequently makes contracts for the supply of timber or the erection of buildings from local materials and both Sivepo and Inonda profited by these during the survey period. The contract may be made with an individual, who pays the others from the proceeds, or a group.

There are some opportunities for casual employment on plantations, but most planters prefer to employ workers from outside the Orokaiva
[461] area because they are less likely to be simultaneously involved in subsistence tasks and traditional obligations. Moreover, such work is not popular with the Orokaiva, who prefer to work for relatives holding blocks under the ex-servicemen's settlement scheme at Sangara, Isavene or Girua. Individuals or whole families may stay
[465] with relatives or friends in this way, sometimes for several months. No formal agreement is entered into and the villagers may work only intermittently, in return for their keep and, at the end, a sum of money and additional payment in kind (tinned meat, rice, sugar, etc.). In some cases, however, regular payment is made at the official casual rate of $3 a week. Work of this kind is popular and during the survey there was almost always at least one person temporarily absent from Sivepo visiting or working for settlers. At Inonda, it was possible to work for settlers on the Girua blocks while resident in the village.

[447] Anglican mission stations frequently employ school-leavers as
[465] 'medical orderlies' and 'nurses' in their clinics and hospitals. Standard IV or V education is required but the salary is normally only $1 a month and few adults are involved.

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[1] This applied to villages between Popondetta and Inonda when the road to Oro Bay was improved in 1963-64, and in 1964 work began on the realignment and improvement of the Popondetta-Kokoda road, which passes through Saiho census division within three miles of Sivepo.

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MAP 3

8: Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

Chapter 4

The two communities: Sivepe and Inonda

184 The villages of Sivepe and Inonda represent the extremes of population density, and therefore land availability, in the sub-district. There are significant differences between them in resources and in the degree and character of their participation in the monetary economy and their interactions with the principal external agencies.

Sivepe

133 Sivepe is situated 1,300 feet above sea level on the lower north-
[134] western slopes of Mt Lamington. Its land is classified by the CSIRO survey (1964:32) as belonging to the Awala Land System and is
137 characterised by fertile loam topsoils and a close-textured drainage system. The vegetation comprises predominantly secondary forest and various stages of regrowth, with little grassland. The land-
311 use potential is regarded as high and the fertile, well-drained soils are best suited for perennial (tree) crops.

361 The village is located in the most densely settled part of the sub-district, the Saiho census division, and there are eighteen villages within a radius of three miles (see Map 3). It has been
[131] on its present site for about ten years, but preparation of a new site, less than one mile away, was commenced late in 1964. Sivepe is twenty-eight miles from Popondetta by road, the last three miles being a little-used jeep track linking Awala with the villages on the lower slopes of Mt Lamington. Consequently, coffee and rubber have to be carried to Awala (or nearby Saiho) to be sold and purchases are normally made in the trade stores there. At Awala are a European rubber plantation, a rubber factory which purchases village latex and a well-stocked trade store. At Saiho are two trade stores, the principal Administration hospital for the Northern District (where medical orderlies and infant welfare nurses are trained) and a primary 'T' school. In mid-1964 a daily bus service was established between Saiho and Popondetta.

491 Also in mid-1964, several villages voluntarily commenced the
[499] construction of a new all-weather road, linking Sasembata mission

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8: Waddell & Krinks B-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

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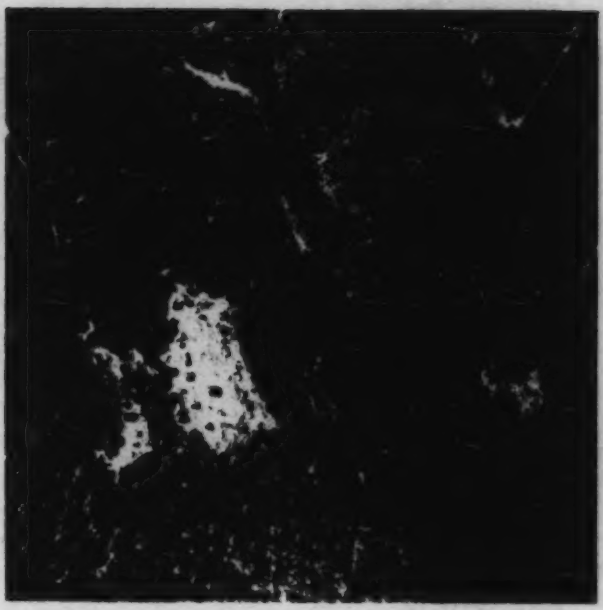

Plate 1. Sivepe - a 'line' village located in a forest clearing adjacent to the Sohu river and a minor vehicular road linking Sasembata and Awala. (Vertical photograph, scale 1:2,200.)

station with Boru on the main road near Awala and passing within a mile of Sivepe, but it was not completed by the onset of the wet season. It was intended that this would be used by the OCCS and other purchasers of produce. This was the main reason for the Sivepe people's decision to move their village to a site within 200 yards of Sasembata mission station.

Sasembata mission is a head station of the Anglican mission. Among its facilities are a church, administered by an Orokaiva priest, a hospital and infant welfare clinic run by a Papuan medical orderly but supervised from the Administration hospital at Saiho, and a primary school with 400 children on the roll.[1] The school includes classes up to Standard V and is headed by an Australian with the assistance of ten Papuan teachers. A small trade store is operated by Oro Ltd at Kongohambo village adjoining the mission station.

Sivepe itself is laid out as a line village, with lineage members tending to occupy adjoining houses (see Map 4). The houses have a mean size of 229 sq ft and are built entirely of local materials, with the exception of nails which are now commonly used.

Three clan branches are represented in the village and two of these, the Jegase and Timumu clans,[2] comprised the survey sample (55.3 per cent of the total village population of 114 in January 1964), the characteristics of which reveal them to be representative of the population as a whole.[3]

The population of the sample declined by 20.6 per cent, from 63 to 50 persons, over the survey period. Ten of the 17 departures migrated to other villages and the rest sought wage employment within the district or in Port Moresby. This continuing out-migration intensified certain characteristics of the village's labour force, for by January 1965, 37.8 per cent of the potential adult male labour force was absent, the majority on a long-term basis in unskilled or semi-skilled work or low-ranking positions in government service.[4] In three cases, wives and children remained in the village and were supported by close kin. In January 1965, there were only two men remaining in the 20 to 34 years age groups.

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[1] An estimated 80 per cent of the children in the area receive some schooling.

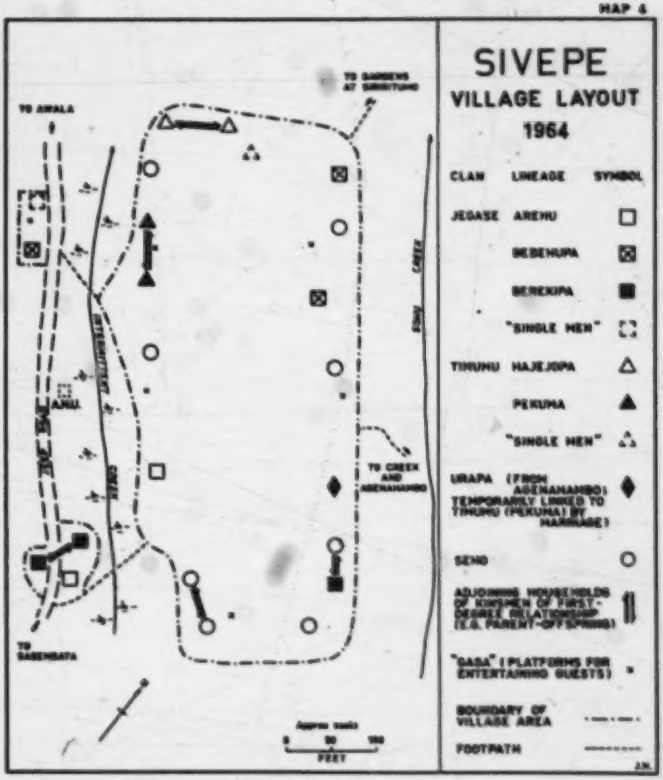
[2] Clansmen also reside in twelve other villages, all within a radius of 3.7 miles of Sivepe.

[3] See Appendix 1 and Fig. 4:1.

[4] See Appendix 2.

8: Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

MAP 4



81 Waddell & Krinks E-4,5 (1964-1965) 1968 OJ23 Orokaiva OJ23

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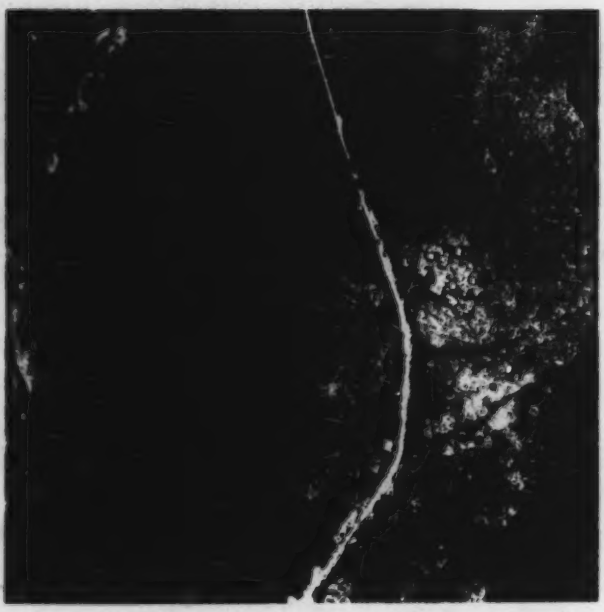

Plate 2. Inonda - the new village situated close to the grassland/forest boundary. The main Popondetta-Oro Bay road runs between the village and the Girua river.
(Vertical photograph, scale 1:4,200.)

361 Inonda lies in Buna census division, the most sparsely settled part of the Popondetta sub-district (with the exception of Huhurundi). Apart from an ex-servicemen's settlement block, there are only four villages within a three mile radius of both village sites (see Map 5). At the beginning of the survey, Inonda was on a site it had occupied since 1956, but during 1964 it was rebuilt about a mile to the south-west, still on the forest-grassland border.

491 368 131 The village is about ten miles from Popondetta, to which it is linked by a good all-weather road. About three miles towards Popondetta, west of the Girua River, is Hohota village and its off-shoot settlement, Ijika, where there is a local government council aid post, a church and attached primary school (with classes to standard III), and a trade store. Running north-east from the main road parallel to the Girua River is a line of ex-servicemen's settlement blocks - one expatriate - and eleven Papuan-owned, one of them by a former resident of Inonda and several others from nearby villages. There are five trade stores on or near the blocks, two of them expatriate-owned, and a new Administration school. This latter is not used by the Inonda people, although they believe it to be a higher standard than the mission school. Eastwards from Inonda, the road runs through sparsely-populated grass plains to the coast at Oro Bay. Late in 1964 the Popondetta airstrip was closed and a wartime tarmac strip two miles east of the village was reopened to serve the township, with a consequent increase in traffic along the main road.

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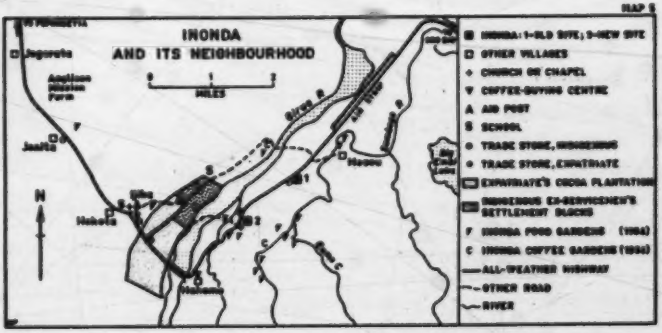
MAP 5



8: Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

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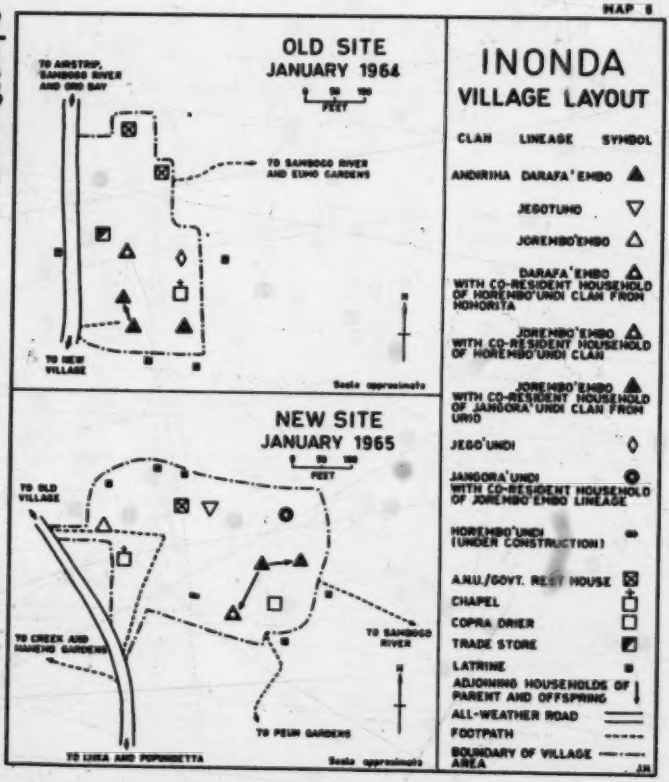
MAP 8



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(ii) The daily routine and duration of activities. As suggested above, both the duration of an individual activity and the time at which it occurs within a given day may have some bearing on the broader patterns of activity. Williams (1930:21-31) describes an individual as characteristically undertaking several tasks within a single day, garden work normally being completed by midday. Table 6:10 reveals the need for modifying this view. The mid-point of most activities falls within the 1100 to 1400 period, and of the 19 extra-village subsistence tasks 15 have a mid-point falling after 1200. The tendency is to leave for the gardens in early or mid-morning, returning to the village in mid-afternoon. In garden work several tasks are normally carried out during a single visit, food being harvested last.

Of the 13 activities with a mean duration exceeding 3.0 hours only 4 - clearing, planting yams, sago-making and mourning - are associated with the subsistence sector. Of the others, 6 concern the marketing of crops, both subsistence and cash, and 1 is paid work. The subsistence tasks occur infrequently while the cash-producing ones are a regular feature of a commercial economy. While the total time devoted to cash-producing activities in Sivepa is small, it would appear disproportionately disruptive of a subsistence routine characterised by the daily pursuit of a large number of tasks of short duration. Significantly, in terms of total time expended, the two most burdensome cash cropping tasks are processing coffee and harvesting rubber. The mid-point of both these occurs early in the morning (0941 and 0838 respectively) and since the activities are of short duration the intention is apparently to complete them before starting the daily subsistence routine.

While the time devoted to cash-producing activities, both in total and proportionately, is slight, the characteristics of their occurrence and duration suggest that areas of potential or actual 'stress' may already exist in terms of the juxtaposition of subsistence and external sectors at this basic level of work organisation.

The allocation of time within individual activities

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In a community practising shifting cultivation, where all movement is by foot and all goods are carried on the back, travelling comprises a major component of activity time, therefore significantly affecting the level of productivity. This fact is clearly recognised by the Orokaiva and partially explains village movements. With increasing commercialisation of the economy, the problem of the journey to work becomes more serious on account of the greater volume of goods being handled and increased level of activity.

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One of the stated aims behind Sivepa's projected move was to be sited on an improved road being built to Sasembata in order that

[TEXT CONTINUED ON PAGE 110]

484 produce could be sold directly to buyers at the village.[1] Nothing
491 in Table 6:11 suggests that this move is related to the changing
361 location of gardening activities since the percentage time spent on travelling in connection with clearing activities is actually less than that in connection with subsistence gardening.

Table 6:11

Sivepa: time spent on travelling as a percentage of total time spent on grouped activities

	Percentage of total time	Hours per man-week
Clearing	10.5	0.4
Subsistence gardening	18.6	2.5
Other subsistence food production	14.0	0.4
Other subsistence activities	10.1	0.2
Cash cropping	8.3	0.1
Paid work	15.0	0.2
Household	4.4	0.2
Social obligations	36.7	1.2
Sickness	23.9	0.2
External agencies	22.1	1.3
Other	40.7	0.3
Total	18.2	7.4
Corrected total*	15.0	6.1

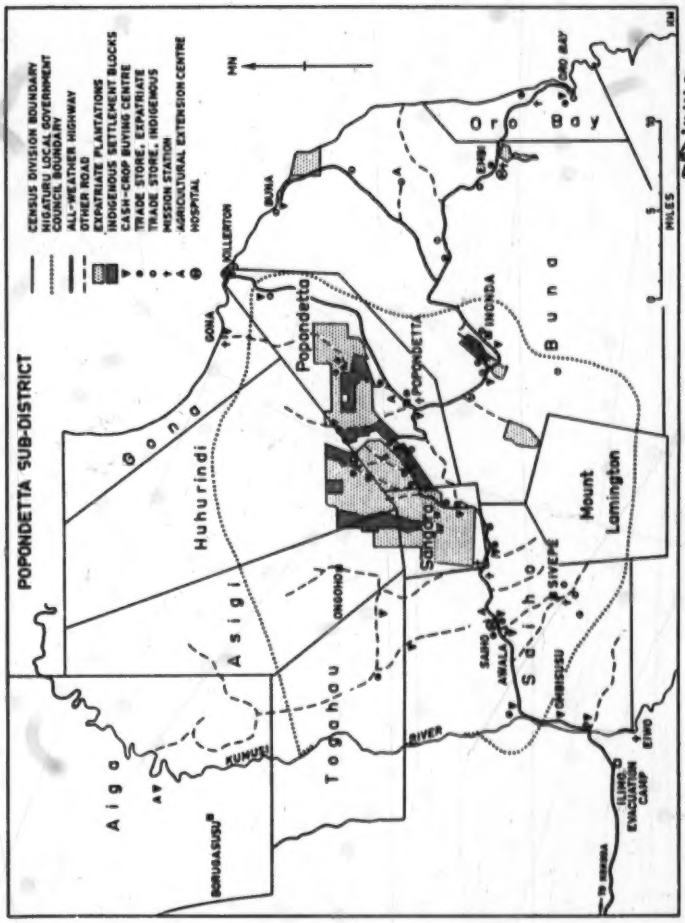
* Accounting for several activities being undertaken in the course of a single return journey, and for journeys modified by travel in the researcher's vehicle.

361 In the one case of land tenure conversion among the Orokaiva for which information is available, it is interesting to note that the main benefit of conversion, as seen by the participants, lies in the

> consolidation of previously scattered holdings.... Under the traditional system a man may have had rights to several separate pieces of land often considerable distance from each other. As a result much time was spent in walking from

361 [1] Other reasons given for the move included, firstly, that the new
824 village would be an amalgamation of four existing ones and this
825 enlarged size would permit the construction of 'better' houses and facilities, and, secondly, the village itself would be a better place because bananas, coconuts, dogs and pigs (all of which are 'no good') would not be permitted in it.

9: Kearney P-5 (1963) 1966 OJ23 Orokaiva OJ23



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[p.44]

Genesis of the Yega Scheme

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The term Yega Scheme has been applied by the Administration to the cocoa-planting enterprise undertaken by the Yega people at Ononda, four miles inland from Gona Mission.

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On several occasions prior to 1960, the Yega people discussed with the D.A.O., Mr M.H. Belfield, their desire to plant extensive areas of cocoa. Suitable land was not available near the coast, and it was not until early 1960 when an old pre-war road was re-opened between Gona and Popondetta that access was provided to suitable forest country further inland.[1] In March 1960 Yega representatives advised the D.A.O. that land was now available and sought his advice and assistance in promoting cocoa production. The land available was mature rain forest situated about four miles inland, just north of Ononda Creek (see Fig.5).[A] This land was part of an area over which the Bovori clan of Yega had exercised rights until they were completely wiped out in inter-tribal fighting with the neighbouring Ahora people. Their land was never reallocated among the remaining Yega clans, but was used as communal hunting land to which no one Yega clan had any stronger claim than others. No complex pattern of clan rights applied in the area so there was no need for compromise among clans during the allocation of blocks.[2] Allocation of this land, whether for subsistence gardens or for cash cropping, was vested in the chief Yega land custodian, Nixon Kairembora, who fully approved of the cocoa project.

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The land was inspected by the D.A.O. and pronounced suitable for growing cocoa. Investigations by the Department of District Administration showed that ownership of the area specified for the cocoa project was not disputed.

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Agriculture and administration officials tried to avoid some of the problems inherent in the Higaturu Council Land Registration Scheme (see Crocombe and Hogbin 1963:89-96) by suggesting that plantings be contiguous rather than in scattered plots of irregular size and shape. Contiguous planting would make all blocks

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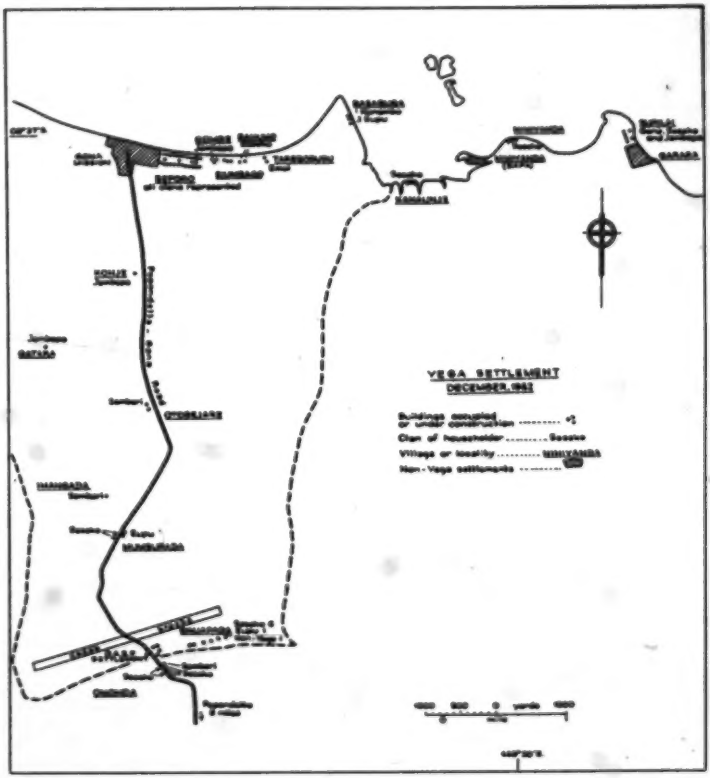
[1] The road was built pre-war by the Rev. Henry Holland and was used by the Japanese. Its reopening was mainly due to the efforts of the Anglican missionary in charge at Gona, Rev. E. Kelly.

[2] This exceptional circumstance and its bearing on the accord among clans which had prevailed, at least up to the time of writing, is relevant not only to studies of the Yega Scheme but also to the possible use of this scheme as a 'pilot' for future projects.

A. [For fig. 5 see Category 302, p.45--Analyst]

10: Dakeyne K-5 (1962-1964) 1966 OJ23 Orokaiva OJ23
Yega
Ononda

Figure 4



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10: Dakeyne K-5 (1962-1964) 1966 OJ23 Orokaiva OJ23
Yega
Ononda

Figure 5

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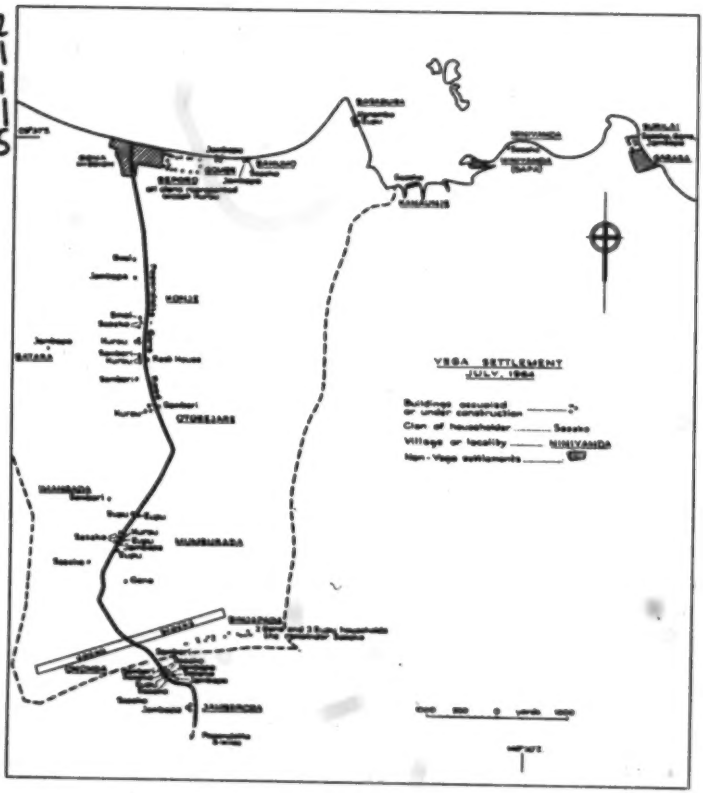

Figure 7

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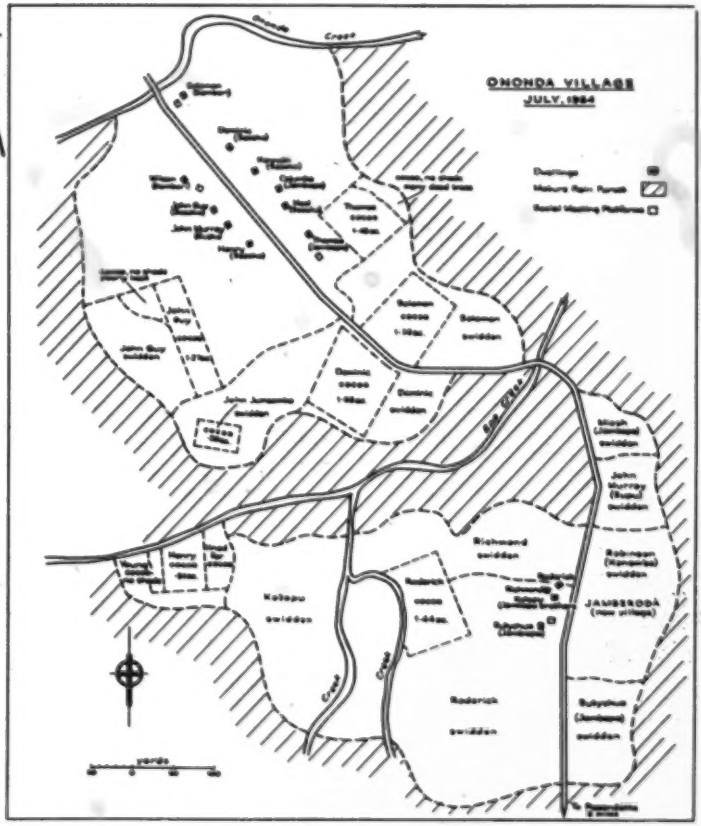

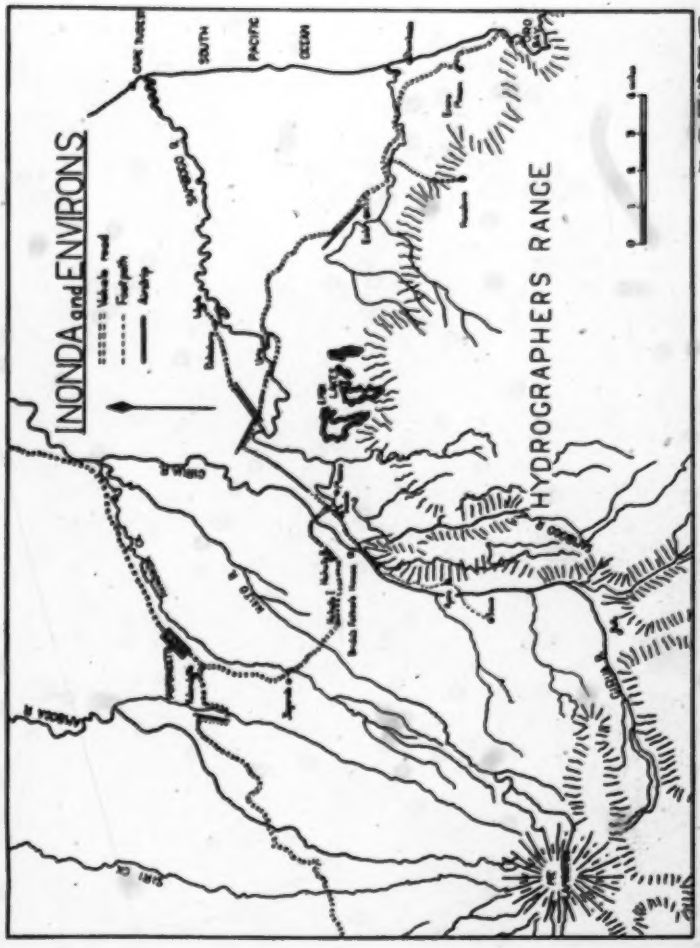

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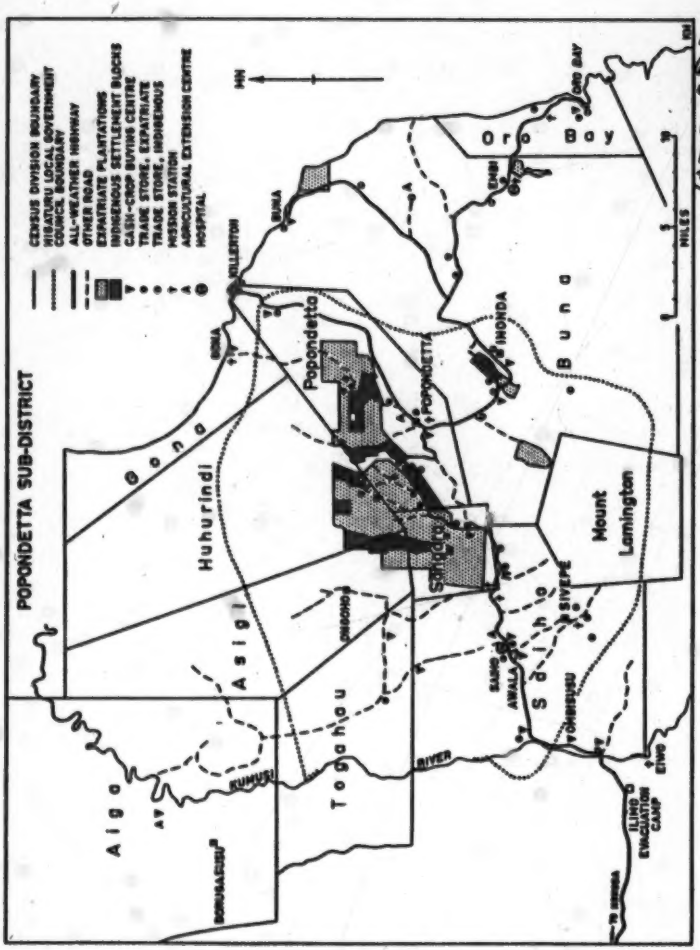
11: Dakeyne K-5 (1962-1964) 1966 OJ23 Orokaiva OJ23
Yega



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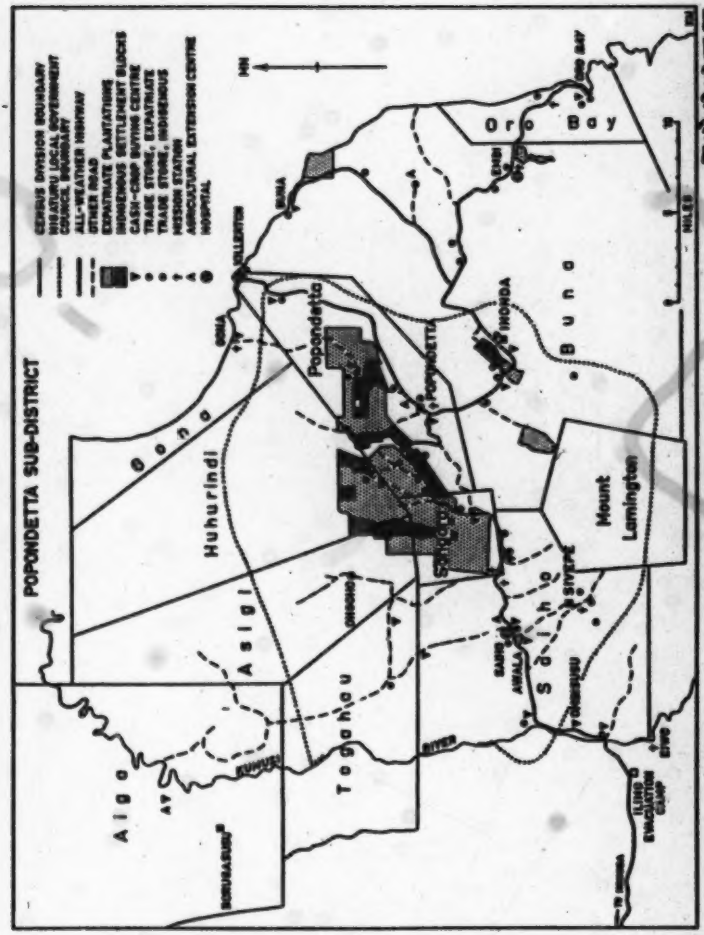
[p.44]

12: Crocombe B-5 (1962) 1966 QJ23 Orokaiva QJ23
Inonda



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[p.iv]

warfare. He sees their personality attributes as being "congruent with the social structure that favours individuality and mobility". Reay (1953:111) states that Orokaiva men are encouraged to be highly individualistic. Superficially at least, these views would suggest that the Orokaiva would tend to be receptive to the changes currently being wrought by cash cropping and paid labour though, as Keesing points out, their reaction will be dependent on the monetary and other incentives which these activities provide.

Extension services: McCarthy (1962:110) notes that the Orokaiva people "suffered at the hands of the Yodda valley goldseekers at the end of the nineteenth century and the severity of the magistrate Monckton at the beginning of the new century, and it is said that they have not forgiven either occasion." Subsequent contact experiences have not been such as to alter their attitudes very greatly, and this situation detracts from the effectiveness of the available extension services.

No agricultural extension workers had visited Inonda during the twelve months preceding our visit and it is understood that extension patrols seldom call there more than once a year, and then only for brief visits. Several Inonda people attended a one-day extension class on coffee harvesting at Popondetta during our stay, but this was the only such class they had been aware of in that year. People can, of course, consult extension officers in Popondetta at any time, but as a result of language difficulties and social distance the Inonda people do not take advantage of this facility. The number of extension staff at present in the area is quite inadequate to serve the needs of a community which has only recently become aware of the techniques and potential of cash cropping. More extension services would probably result in extension of cash crop plantings, improved husbandry, and higher output. Pig production could also be expanded to the limits of the existing market.

Transport and marketing: With the completion of the Girua road there will be all-weather road access to both Popondetta and the port of Oro Bay which is soon to be developed to handle overseas shipping. There is at present no commercial transport service to take produce to market and none of the villagers have transport of their own. The quantity of pro-

14: Crocombe & Hogbin E-5 (no date) 1963 QJ23 Orokaiva QJ23 Inonda

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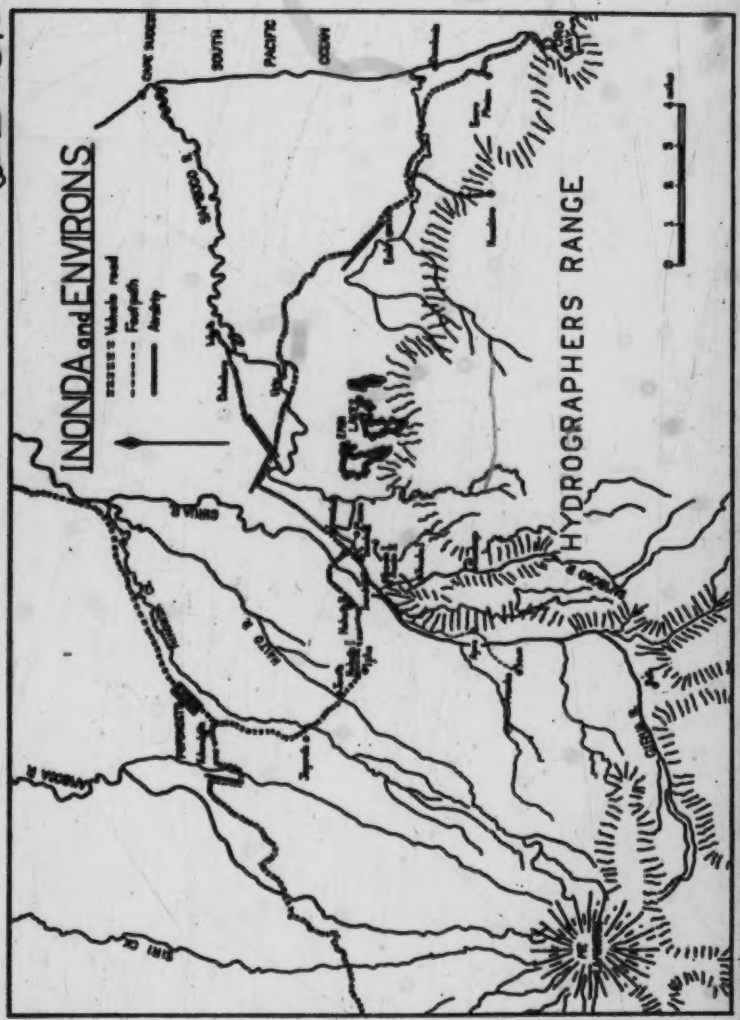
INONDA and ENVIRONS
Vehicle road
Footpath
Jeepway
HYDROGRAPHERS RANGE
SOUTH
PACIFIC
OCEAN
CAPE SUDEST
Inonda
Ivivisa
Ivivisa R.
Ivivisa R.
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14: Crocombe & Hogbin E-5 (no date) 1963 OJ23 Orokaiva OJ23
Inonda

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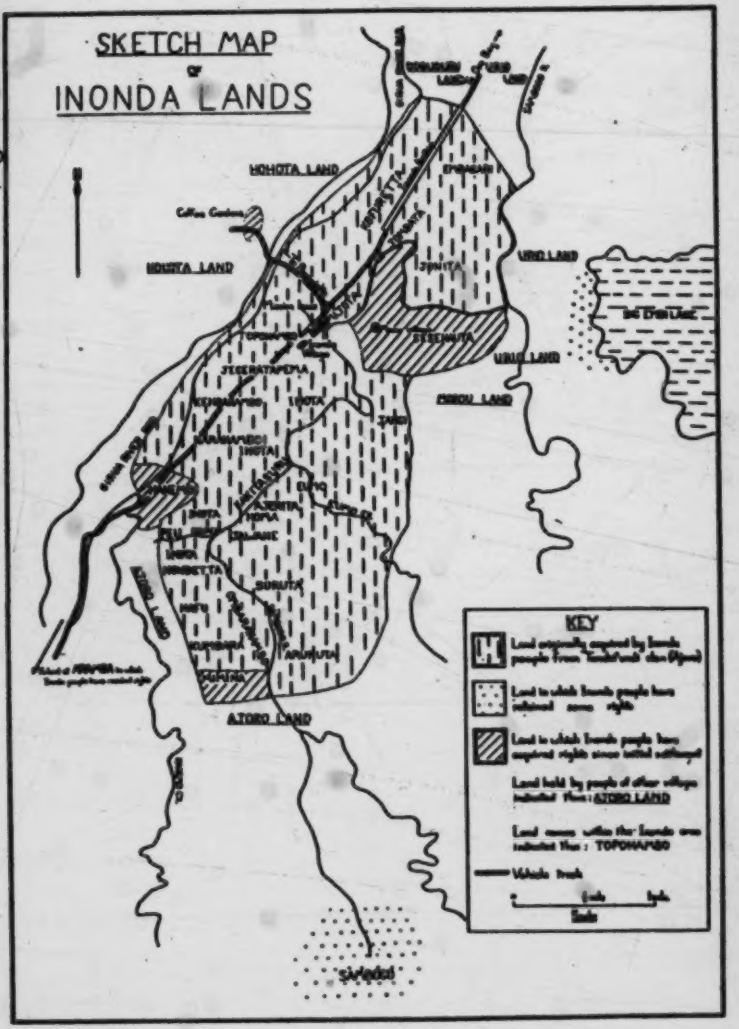
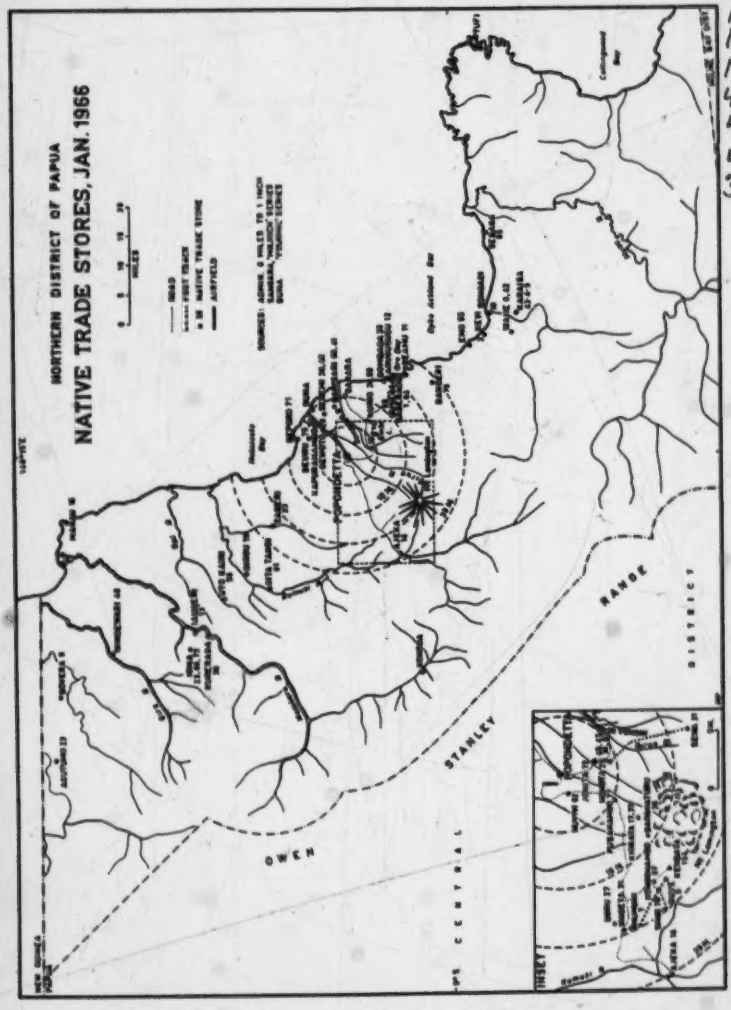


16: Oostermeyer & Gray U-5 (1965-1966) 1967 OJ23 Orokaiva OJ23



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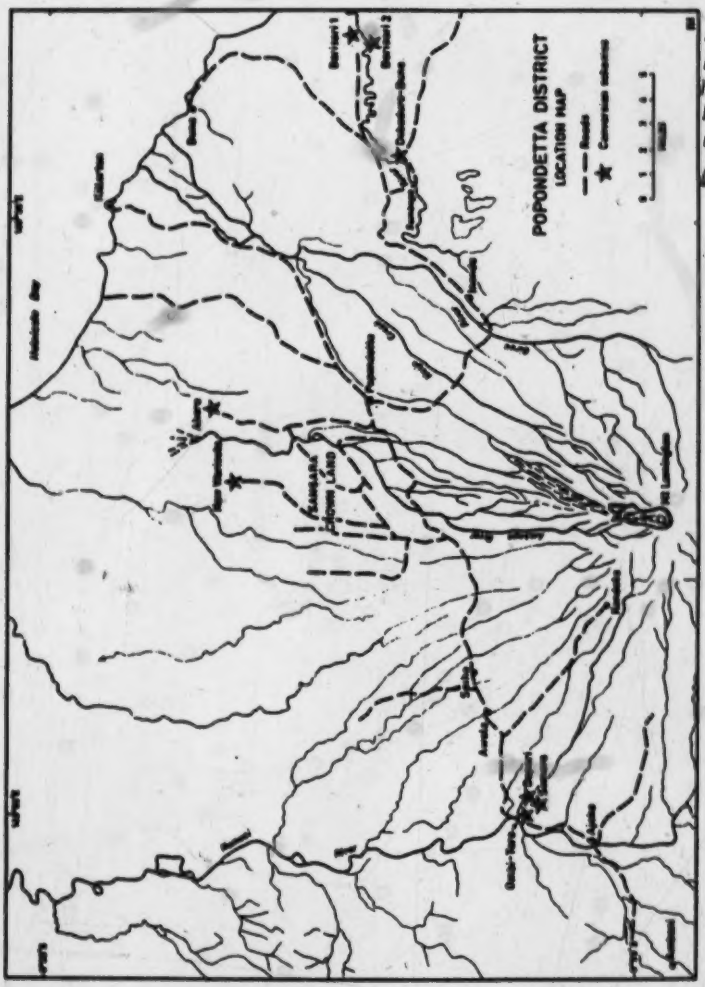
17: Morawetz U-4,5 (1966) 1967 OJ23 Orokaiva OJ23
Ombi-Tara



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423 had rights.[1] Conversion has caused a redistribution of land rights,
311 with some people losing and others gaining land. Several men who
361 claimed they had less land after conversion than before said that
829 twenty acres was ample for their needs and that they were pleased to give up some land to help their co-villagers.

657 There are indications that conversion at Ombi-Tara has facili-
423 tated co-operation between villagers who are planting cash crops.
182 Previously any man who wished to plant cash crops had to work with little assistance, often in a relatively inaccessible area. Since
476 conversion has been introduced, the new road gives easy access to all blocks and people are more easily able to help one another.

361 Paradoxically, conversion to individual holding of land appears
491 to have strengthened intervillage, interclan and interpersonal co-operation and to have fostered a community spirit. Intervillage
657 co-operation is demonstrated by the establishment of a joint Ombi-
423 Tara bank account to purchase equipment for the bush rubber
621 processing unit, and by joint discussions on the nature of the
182 new tenure system. Interclan co-operation is seen in the leader of the Kuai clan granting permission for the allocation of a block on Kuai land to a man of Mumu clan. Interpersonal co-operation is illustrated by the apparent willingness of large landholders to give up all previously held land rights without receiving [illegible] compensation, in order to enable all to take part equally in the scheme.

657 The Ombi-Tara people are pleased and flattered that many people
423 visit and inspect the blocks. They heard that Ombi-Tara was men-
182 tioned on the radio and are happy that others ('people all over
186 Papua-New Guinea') should know of their experiment. When two Australian friends of mine paid a short visit to Ombi they were asked with expectant pride if they had heard of the Ombi-Tara scheme in Australia. The leader of the Mumu clan said, 'We want Ombi-Tara to have a big name like England, Japan, Hong Kong, Rabaul and Lae'.

Publicity and information

657 Most Ombi-Tara people (82 per cent) said that they first heard
423 of the possibility of converting land to holding under individual
177 title after the visit of the Agricultural Officer in late 1963. No one reported hearing first about conversion through Local Government Councils, from the Anglican Mission, on the radio or through

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[1] The then District Agricultural Officer considered consolidation of fragmented holdings to be one of the main benefits that would emerge at Yega, the first tenure conversion scheme in the Northern District (Belfield 1962:1-2).

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Fig. 3. Main areas of subsistence gardens of one Yega clan (Kurou clan)

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within his sub-clan so that all sub-clan members may be found working land in close proximity. This custom was necessary in the past for mutual protection against raiders. It

[P 7-B)

[TEXT CONTINUED ON PAGE 8-B]

361 The new village sites also reduced walking time to the gardens.

618 722 The war of 1939-1945 affected the Yega in several important ways. Their territory became one of the major battlefields of the Pacific War. Every person migrated from the area with the exception of one old crippled woman who somehow managed to survive for eighteen months in the bush. Almost all able-bodied men served in the army or labour corps and the women and children lived at another Anglican mission about thirty miles to the north. When they returned, they found all buildings, and any belongings that they had left behind, destroyed and most of their coconut palms cut down or damaged by gunfire. There were some compensations. The Australian Government paid thousands of dollars in war-damage compensation for all trees and property but, more important, the stimulus of travel, and meeting and working with Australian and American soldiers, gave the younger men in particular a broader view of life which triggered off changes in their traditional economy. In addition, the transfer of the Administrative headquarters from Buna to Higaturu resulted in the construction of a major road to the port of Cape Killerton and brought the Yega into closer touch with the outside world than ever before. As a result, between 1945 and 1950, about twenty families left their re-built villages and moved east to found the new village of Surilai at Cape Killerton (Fig. 9). Men living at Surilai have since found regular employment on the Government wharf at Cape Killerton.

618 701 722 727 729 657 199 177 491 361 166 [1464]

178 433 464 466 Major post-war changes in the Yega economy have resulted from their attempts to increase their cash earnings. Before the war many men worked as indentured labourers on plantations or on the wharves at Port Moresby

[P. 13-A] [TEXT CONTINUED ON PAGE 14-B]

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Fig. 12. *Settlement pattern of the Yega in 1964, showing recent dispersal of the population and the break-down of clan-based villages. House marked "A" is ringed in Fig. 11*

[P.14-A]

657 Sivepe, as it happens, was one of the villages in which the plan
361 was pioneered.

Finally, I should refer briefly to communications. One
[491] general effect of the eruption was a shifting of villages to the side of jeep roads, as Belshaw also mentioned. The administration favoured this trend which greatly facilitated patrolling the villages. The Orokaiva always seem to have a liking for the Australian-built roads; Monckton already refers to their fondness for travelling over it and explains it gave a sense of security against possible attack by hostile tribes. Though this can hardly be the reason today, the liking remains. Over the last few years, the roads have begun to yield economic and practical advantage: trucks collecting coffee visit the villages and occasionally people can pick up rides from passing vehicles. Speed of travel is also improved for pedestrians. I shall discuss ideological aspects of this liking later.

872 The accessibility of facilities has also improved since
797 the eruption. Sivepe children now all go to the school at the Sasembata mission station which teaches up to Standard 6. Inonda children were first introduced to schooling after the eruption when the Sava people joined them accompanied by a mission teacher.
[368] After this mission teacher retired, Inonda was dependent on a school at Hohota. Only a few children went to this school because it was six miles away, across a deep river, but today, after the building of a new road and a bridge, and the latest shift of Inonda village, this distance has been reduced to about three miles and school attendance is regular.

The eruption changes the centre of gravity of the district.
368 The pre-eruption settlements of Higaturu and Sangara contained all
731 governmental and mission facilities, including the hospital and the schooling past Standard 2. Sivepe's link with these facilities was by a bush track running through Isivita. Today, Popondetta is the centre, but the hospital is at Saiho, the senior college near Agenahambo, the Local Government Council in the new Higaturu, near
[491] Agenahambo. Thus the main road to Popondetta, now greatly improved, has become the main artery. Nonetheless, for those who have to walk, the bush tracks from Sivepe to Saiho, Awala and Agenahambo are still important thoroughfares used by many dozen people every day.

Section 4: Resources

423 I have already referred to the main resource, owned by the
311 Orokaiva, which is their land. The Sivepe people own only about 480 acres, almost entirely gardening land, and very little of their land is in virgin bush. This small area is useful for certain

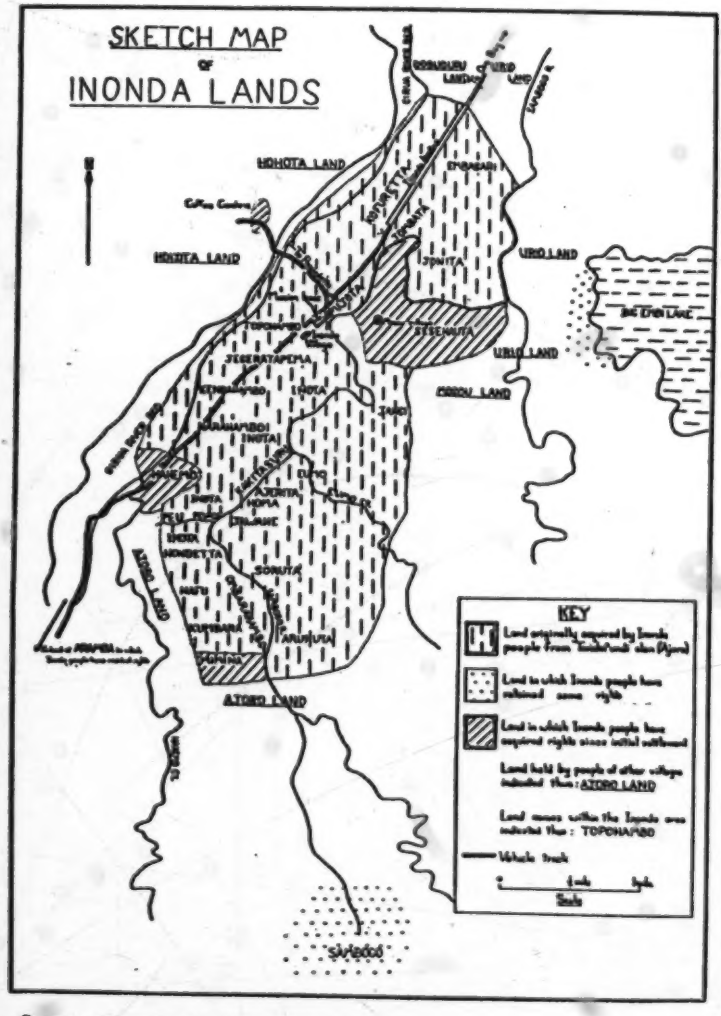
653 a council responsibility. While the rebuilding of the arterial road
from Popondetta and Kokoda was an expensive (and seemingly interminable)
●[491] responsibility of the government, the side roads became the council's
responsibility. Similarly, the government built the major hospitals
while the council looked after the village aid posts.

652 The council's revenue mainly came from taxes--a head tax of
$8 for men and $1 for women. This is the only personal tax directly
[687] levied among Orokaiva village people and has replaced the government
head tax. Its collection was not a government but a council respon-
sibility, although defaulters could, of course, be brought before a
magistrate and sentenced to a term in a government jail. Councillors
explained to the villagers that the taxes they paid went to pay for
their roads, aid posts, water supplies, etc. The government hoped
that villagers would be more ready to pay their taxes if they could
see tangible local benefits to justify them. One effect of the system
was that villagers became very interested to see that as much as
possible of the tax money should be spent in their own locality. They
rapidly developed a strong propensity for parish-pump politics. When
I visited Sasembata district first, there was little evidence of any
council projects in the Sasembata wards. People objected to paying
[664] their taxes: they were not getting anything for them. Pressure
resulted in roading improvements and plans for a comprehensive water
supply for the area. Councillors who did not fight successfully for
such causes were liable to miss re-election.

The head tax manifestly acted as a significant economic incentive.
[461] A man who grew no coffee and earned no money could not pay his tax.
Even if a man could not be bothered harvesting all his coffee, he
would certainly harvest enough to pay his tax. Some men who had no
coffee took plantation jobs a month or two before the tax was due. I
noticed this in two cases at Inonda; most of the Sivepe men had coffee
[687] gardens and did not need to work outside. For the first time, tax
defaulters in 1966 were actually jailed for two months. In one village,
Kendata, there were as many as 50 defaulters who fought the police
and ran into the bush; in Sivepe there were four, all without coffee
gardens.

In spite of this tension, people generally supported the ideology
[77] of the council: they wanted the "new age" and they wanted the kind
623 of services that were supplied by the council. At the same time it
was never forgotten that behind the tax-gathering councillors stood
the government police, armed and ready to make arrests if the councillors
were resisted or attached, as sometimes happened. Those who did not
pay and tried to escape arrests were judged by the conformists to be
ignorant men, unwisely looking for trouble. On the other hand, people
deeply sympathised with them. People wanted the "new age," but they
did not like the element of compulsion that went with it. They re-
elected the councillors who compelled them because they held the
Australian authorities, not the councillors, to be directly responsible.

MAP IV


SKETCH MAP
OF
INONDA LANDS
HOHOTA LAND
HOHITA LAND
URIO LAND
ATORO LAND
KEY
Land originally acquired by Inonda people from Hohota (see figure)
Land to which Inonda people have inherited some right
Land to which Inonda people have acquired rights since initial settlement
Land held by people of other villages indicated thus: ATORO LAND
Land owners within the Inonda area indicated thus: TOPOHAPOO
Vehicle track
Scale

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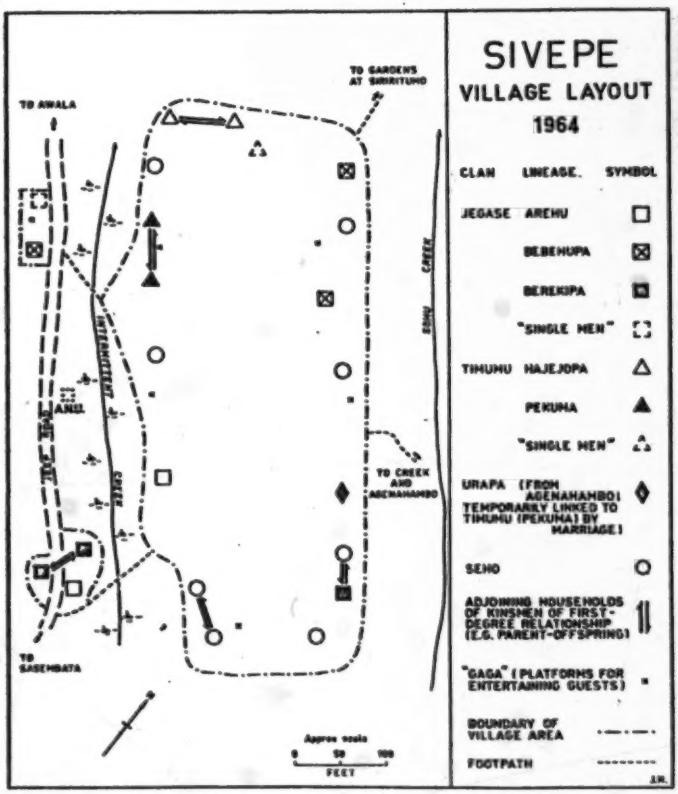
Source: Crocombe & Hogbin 1963 : 105

[End map 4]

Map V



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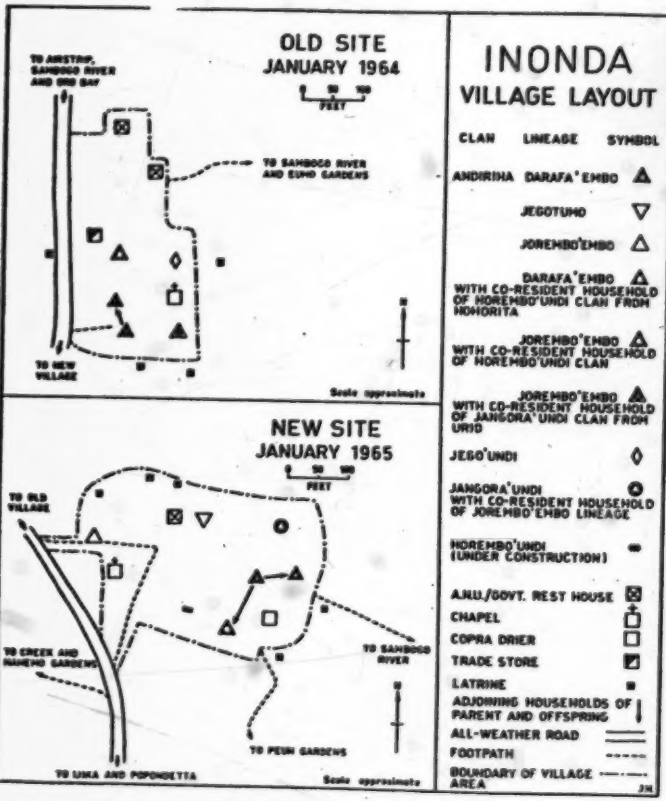
Source: Waddell & Krinks 1968: 38

[End Map 5]

Maps VII and VIII



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Source: Maddell & Krinks 1968: 54

[End Map 7]

Map IX

Source: Waddell & Krinks 1968: 34

[End Map 8]

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22: Schwimmer E-4,5 (1966-1967) 1969 OJ23 Orokaiva OJ23 Mount Lamington

Map XI

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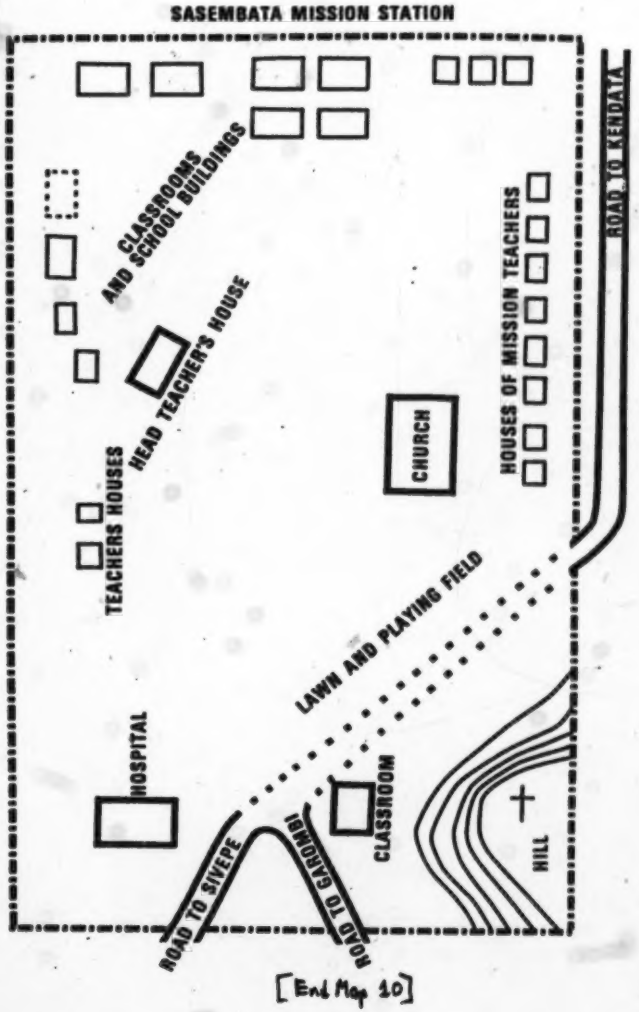
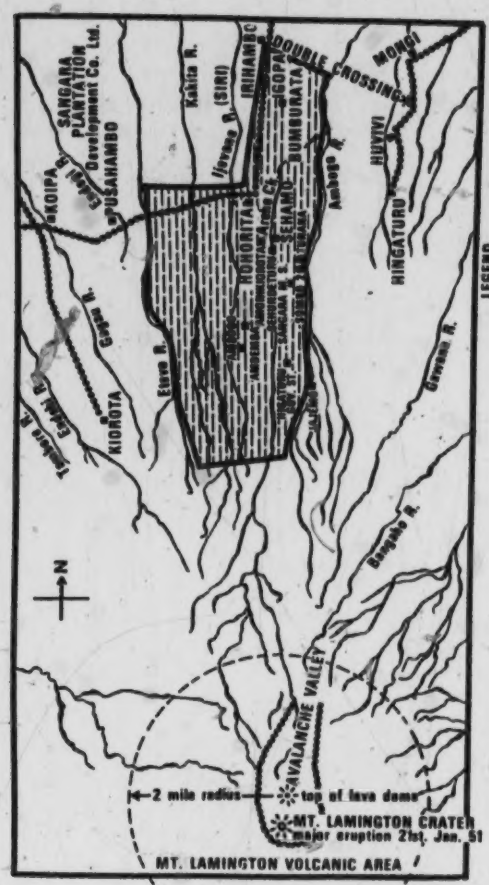


[End Map 10]

22: Schwimmer E-4,5 (1966-1967) 1969 OJ23, Orokaiva OJ23
Mount Lamington



Map XIII

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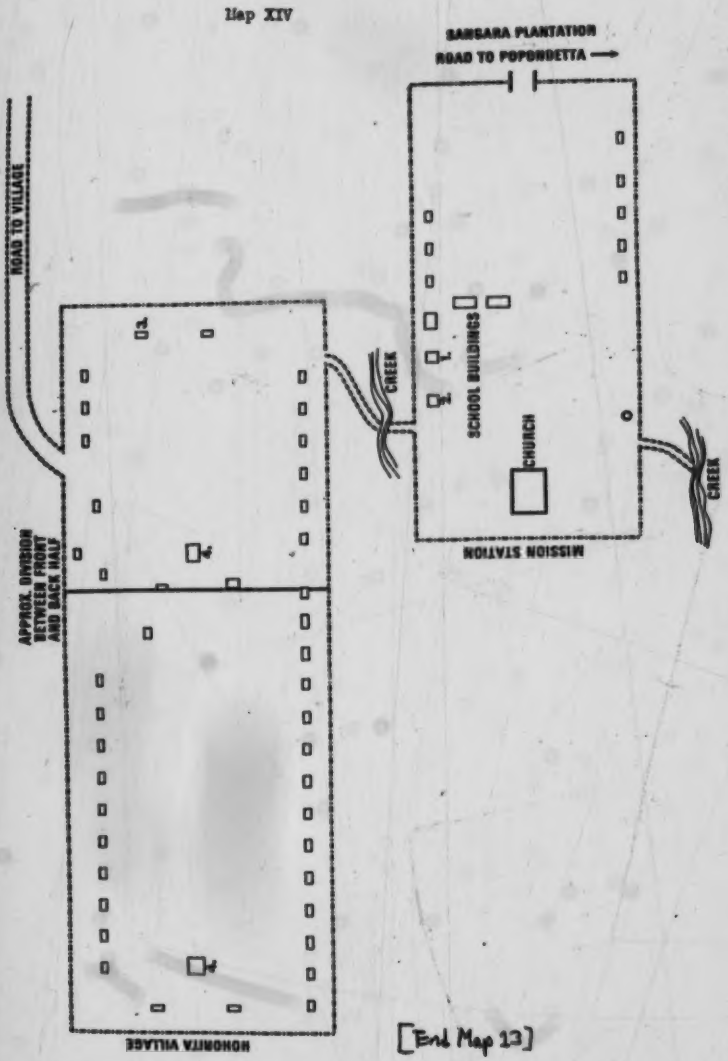
[End Map 12]

22: Schwimmer E-4,5 (1966-1967) 1969 QJ23 Orokaiva QJ23
Mount Lamington

Map XIV



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[End Map 13]

139 condition, it was assumed that death occurred by either
731 the outward blast or the inward backwash. The medical authorities made no post-mortems, however, being fully occupied with the problems of the survivors who poured out from their living sites further down the slopes, shocked, in a few cases very badly burned, and without immediate means of support.

731 A main government trail from Kokoda to the coast, which
● [491] was widened into a military road during the war, winds over the shoulder of Lamington on its northwest side. Almost all of the evacuees headed for this road, some going west to the Wairopi crossing of the Kumasi river, others going north toward the coast. Within two days Government relief teams were flown to the area and were operating emergency camps in these two zones. Food, medicines and other supplies were sent in by way of adjacent airfields. The seriously injured were flown out to hospital centers. The first temporary encampments were condemned by the health authorities as they were in swampy or otherwise unsuitable settings; also the fear remained that they were too close to the source of possible further eruptions. Refugees on the west side were therefore moved back to a major camp at Ilimo. Those on the north (coastal) side were taken to two camps: the "Sangara" region people to Eroro, and the "Isivita" region people to Oro Bay. Emergency district headquarters were set up near the Popendetta airstrip on the north side, with an adjacent camp to stage the people back to resettlement areas. A government vulcanologist established a crude seismological station in a somewhat protected spot within the "closed" blast zone to bring the volcano under scientific surveillance.

In the areas that were most damaged and considered to be dangerous for an indefinite period because of their proximity to the active summit, practically all the occupants were killed. Government rolls of the survivors showed only some 400 as being from these settlements. Some were chance survivors in the more marginal zones, others were laborers, police, school children, or people who were visiting at the time. In the settlements lower down the mountainside and in the adjacent foothill and valley areas, casualties were sporadic and whole groups escaped unscathed. After the first panic of scattering, therefore, local groupings were able in the main to reassemble in the regional camps with such official aid as was necessary. Stray child survivors, including some infants, were readily taken under the care of other families, some of whom had lost children. In general, each group could be dealt with through its delegated leaders. Each was given its rations in bulk to use on its own responsibility and, where possible, accommodated as a unit even under crowded emergency conditions.

133 A second major eruption came on March 5. New ash
731 cone accumulated and blanketed the area, but there were no further casualties. Later that month, at the time of the writer's visit, the smoking peak had another great ash cone building up. There were minor ash eruptions in and around the crater and massive ash flows were occurring down the river courses; vegetation was burnt and water rendered unfit for use many miles into the zone of the surviving green forest and savanna. Uncertainty as to further possible